Application No.

10/749,325

Filed

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December 29, 2003

IN THE SPECIFICATION

1. On page 1, line 9 of the specification as filed (immediately before "FIELD OF THE INVENTION", please amend the title of the application as follows:

--METHODS AND APPARATUS FOR HIGH-SPEED SERIALIZED

DATA TRANSFER OVER NETWORK INFRASTRUCTURE USING A

DIFFERENT PROTOCOL 1394B S800 OVER CAT5 CABLING USING

GIGABIT ETHERNET PHY --

2. On page 3, Par. [0006] of the specification as filed, please amend the text as follows:

In another embodiment, the present invention provides a method of communicating data between an Ethernet system and a 1394compliant system by transmitting an S800 1394b stream within a 1000 BASE-T transmit stream by inserting an illegal 1394b symbolinto symbol into the stream approximately once for every 59 regular symbols transmitted in the 1000 BASE-T transmit stream. This illegal symbol is inserted to compensate for the fact that the bit rate for S800 after an 8B10B encode is 983.04 Mbps +/- 100 ppm, and the bit rate for 1000 BASE T BASE-T stream is slightly faster at 1000 Mbps +/- 50 ppm. The illegal symbol can be inserted into the transmit stream at a fixed rate, or in another embodiment, by utilizing a one-symbol queue that is fed by a 1394b transmitting port and drained by logic which supplies it to the 1000 base Tx PHY. In this embodiment, when the queue underflows, the illegal symbol is generated by the logic with which drains the queue. To receive a 1394-compliant stream over an Ethernet bus, the same approach can be followed, followed. The illegal symbols received are recognized and ignored. In an embodiment, a receive FIFO is centered when the start of a packet[[,]] is recognized, i.e. enough symbols are buffered to allow for the jitter in the arrival rate resulting from deleting the illegal symbols, and also to compensate for ppm clock differences which might result in symbols being placed in the FIFO at a slower rate than they are removed.--